

PS1VN-E
POWER SUPPLY

1. **GENERAL.** This procurement requires a portable, constant voltage, dc power supply.
2. **CLASSIFICATION.** Type II, Class 5, Style E, and Color R in accordance with MIL-T-28800 for shipboard applications. Ventilation openings in the top surface are allowed.
3. **OPERATIONAL REQUIREMENTS.** The equipment shall be capable of operation within the minimum accuracies, limits, and specifications identified below.
 - 3.1 **Output voltage.** 0 to 500 Vdc.
 - 3.1.1 **Output voltage regulation.** 0.01% of output or 1 mV, whichever is greater, for 9% line variations or 100% load variations.
 - 3.1.2 **Output voltage ripple and noise.** 1 mVrms maximum.
 - 3.1.4 **Output voltage stability.** $\pm 0.06\%$ or 6 mV, whichever is greater, for eight hours with constant line load conditions.
 - 3.2 **Output current.** 0 to 400 mA.
 - 3.3 **Output voltage and current indicators.** $\pm 2\%$ accuracy.
 - 3.4 **Output connectors.** Insulated binding posts for positive output, negative output, and chassis ground.
4. **GENERAL REQUIREMENTS.**
 - 4.1 **Power source.** MIL-T-28800 nominal power source requirements are invoked. Maximum power consumption: 500W.
 - 4.2 **Weight.** 21 kg (46 lb) maximum.
 - 4.3 **Lithium batteries.** Per MIL-T-28800, lithium batteries are prohibited without prior authorization. A request for approval for the use of lithium batteries, including those encapsulated in integrated circuits, shall be submitted to the procuring activity at the time of submission of proposals. Approval shall apply only to the specific model proposed.